Antimicrobial Steward Call
June 8, 2021

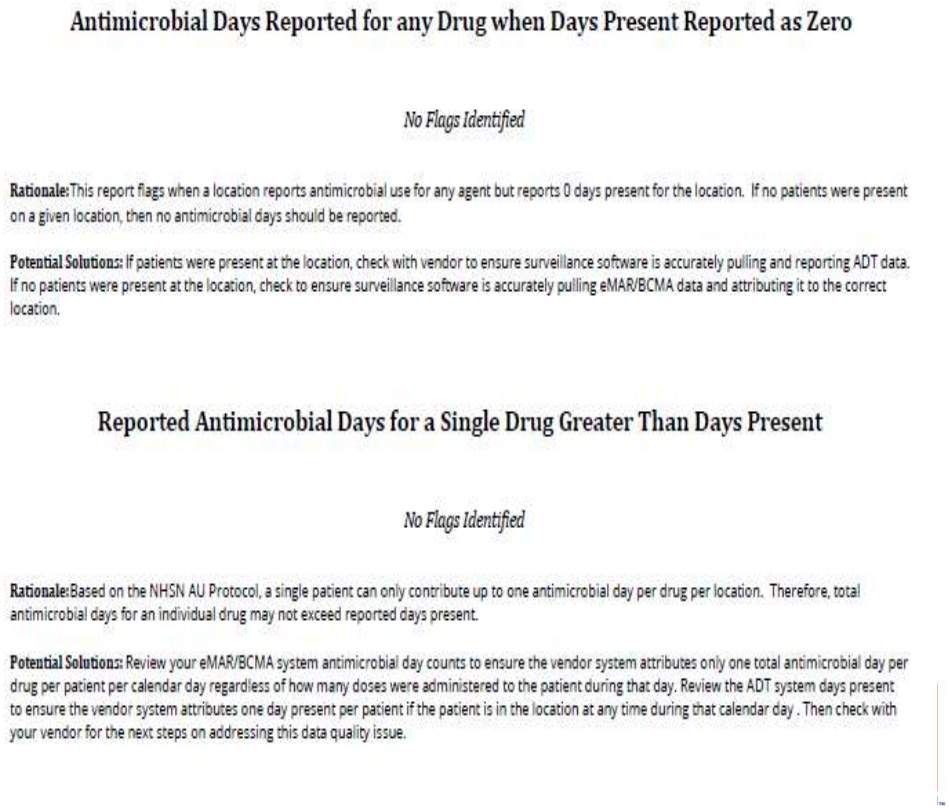
Tennessee Department of Health
Healthcare Associated Infections and Antimicrobial Resistance Program

Welcome

Announcements

AU Quality Reports

- **Q1 2020 Disseminated**
- **Plan for quarterly disseminations**
  - **Data downloaded 6 weeks after end of quarter**
  - **~4 weeks to analyze, prepare and review**



Antimicrobial Days Reported for any Drug when Days Present Reported as Zero

No Flags Identified

Rationale: This report flags when a location reports antimicrobial use for any agent but reports 0 days present for the location. If no patients were present on a given location, then no antimicrobial days should be reported.

Potential Solutions: If patients were present at the location, check with vendor to ensure surveillance software is accurately pulling and reporting ADT data. If no patients were present at the location, check to ensure surveillance software is accurately pulling eMAR/BCMA data and attributing it to the correct location.

Reported Antimicrobial Days for a Single Drug Greater Than Days Present

No Flags Identified

Rationale: Based on the NHSN AU Protocol, a single patient can only contribute up to one antimicrobial day per drug per location. Therefore, total antimicrobial days for an individual drug may not exceed reported days present.

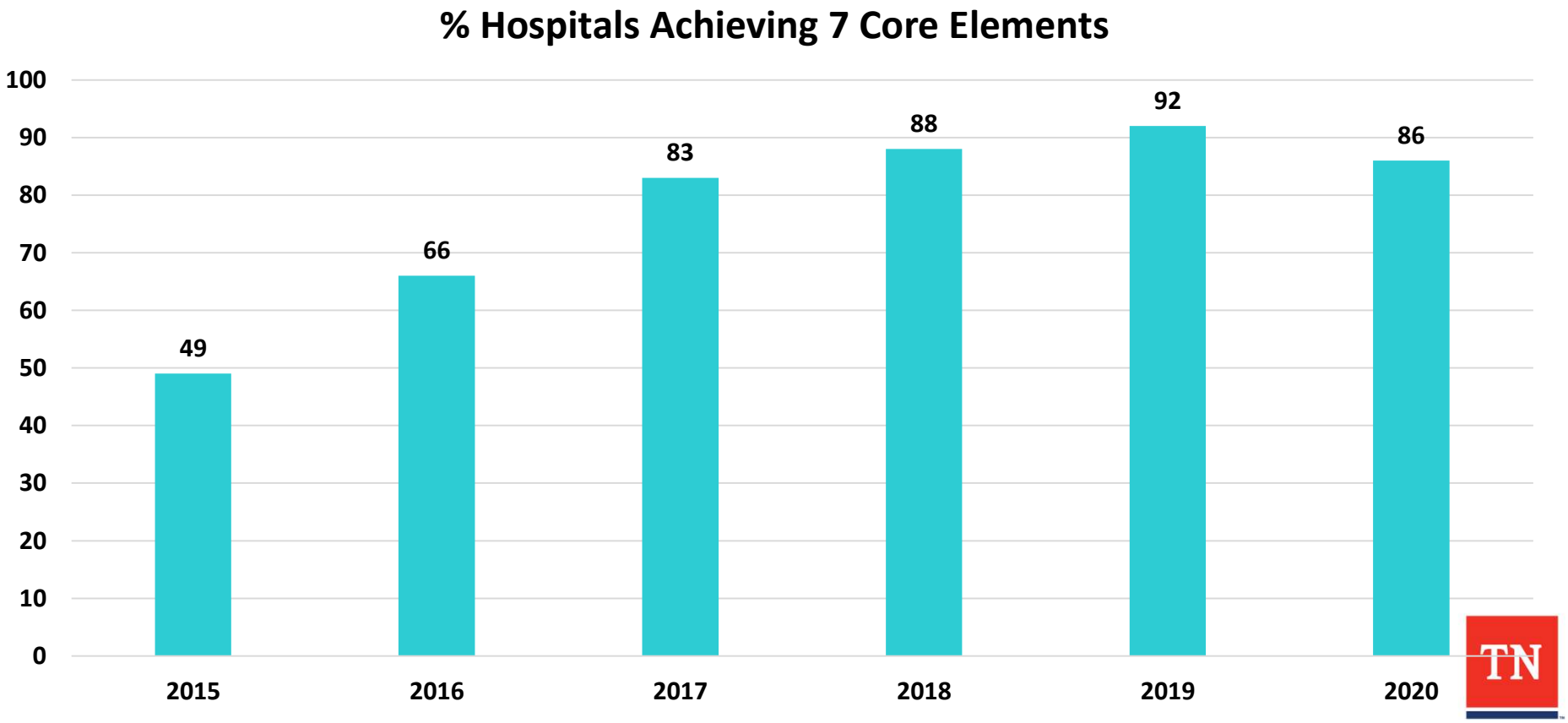
Potential Solutions: Review your eMAR/BCMA system antimicrobial day counts to ensure the vendor system attributes only one total antimicrobial day per drug per patient per calendar day regardless of how many doses were administered to the patient during that day. Review the ADT system days present to ensure the vendor system attributes one day present per patient if the patient is in the location at any time during that calendar day . Then check with your vendor for the next steps on addressing this data quality issue.

Core Element Achievement

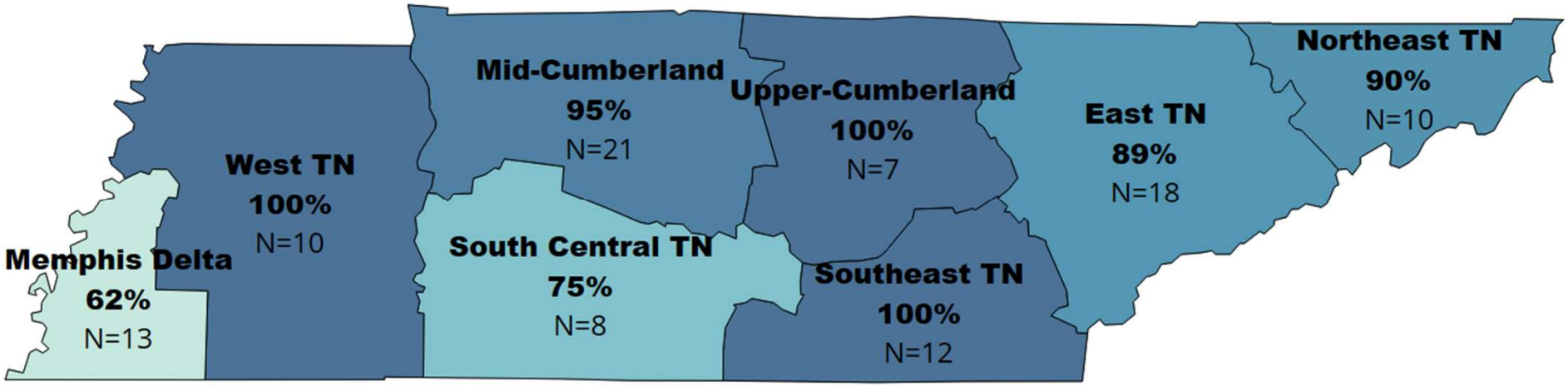
Core Elements Statistics as of May 2021 – YUSUF UPDATING!

Facility Type	Total number of facilities	Number of reporters	% actually have completed survey	5+ core elements achieved	7 core elements achieved	% of reporting achieving all 7
Acute Care Hospital (non CAH)	107	99	93%	98	88	89%
Critical Access Hospital	14	10	71%	9	9	90%
LTACH	9	8	89%	8	8	100%
IRF	30	26	87%	26	25	96%

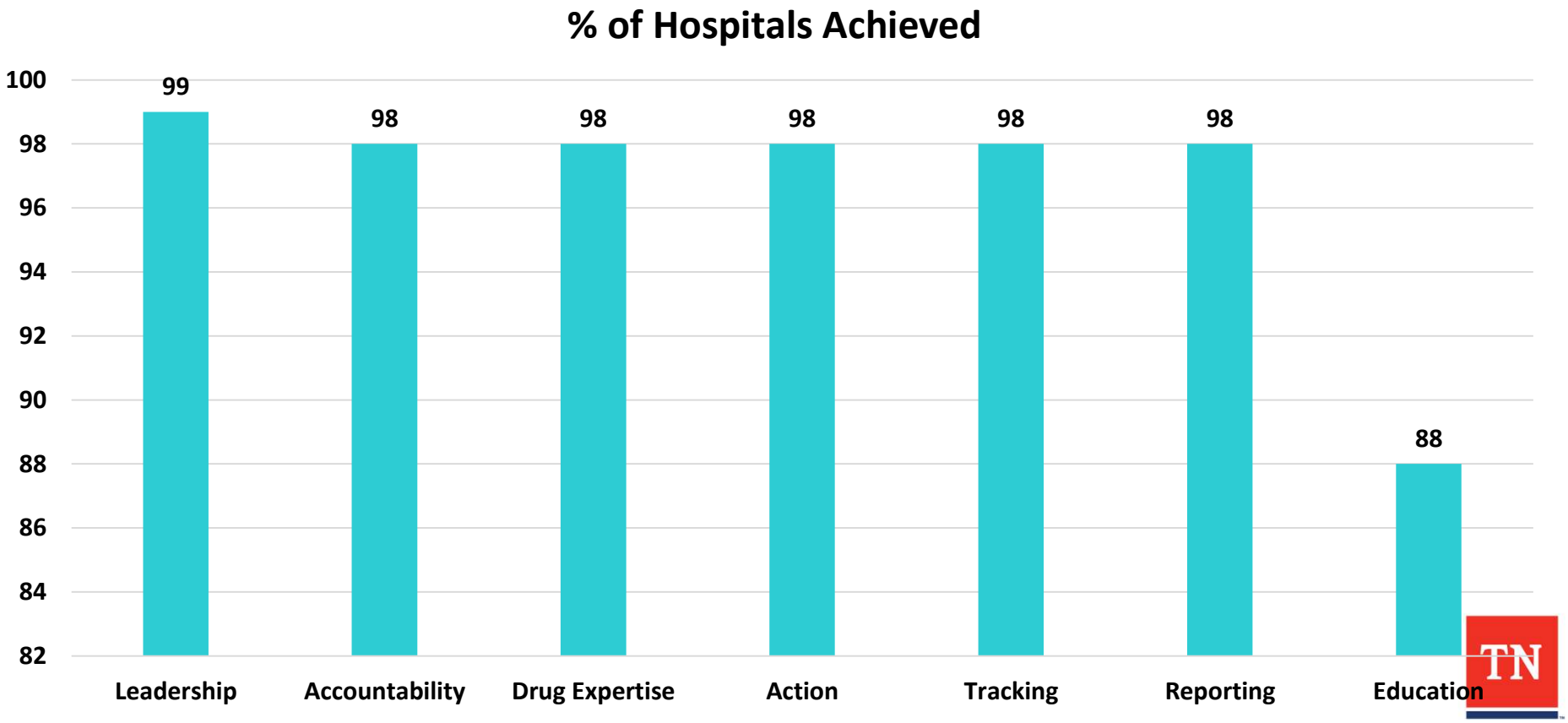
Core Element Achievement Over Time



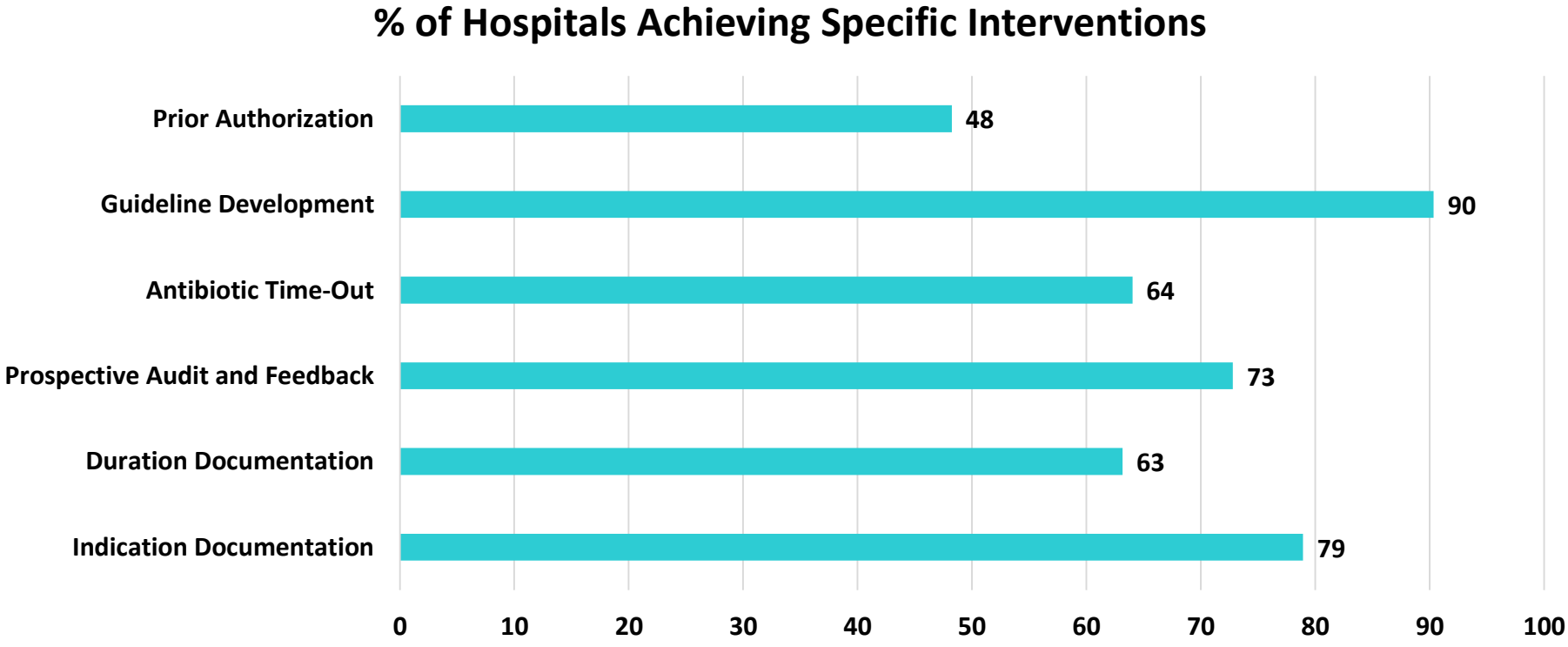
Percent of ACH achieving all 7 Core Elements by Region, 2020



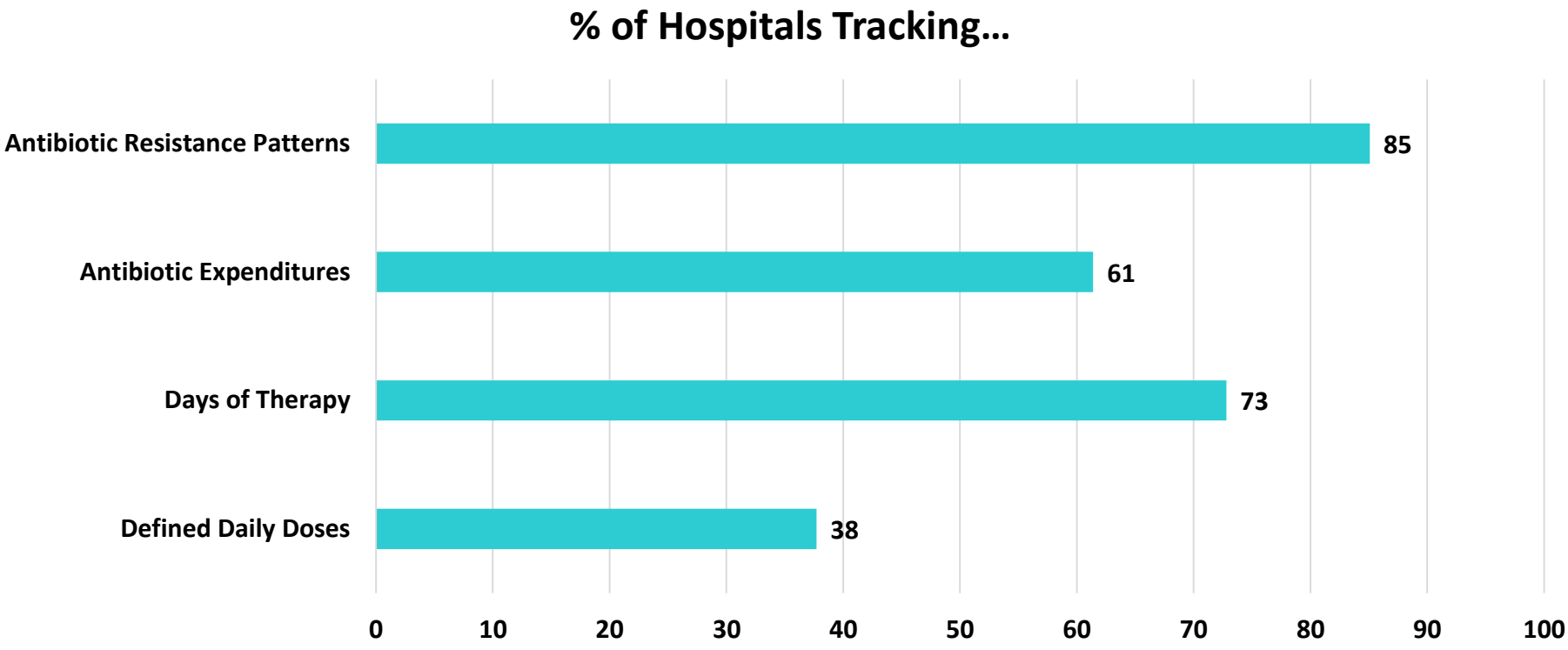
2020 Achievement by Core Element



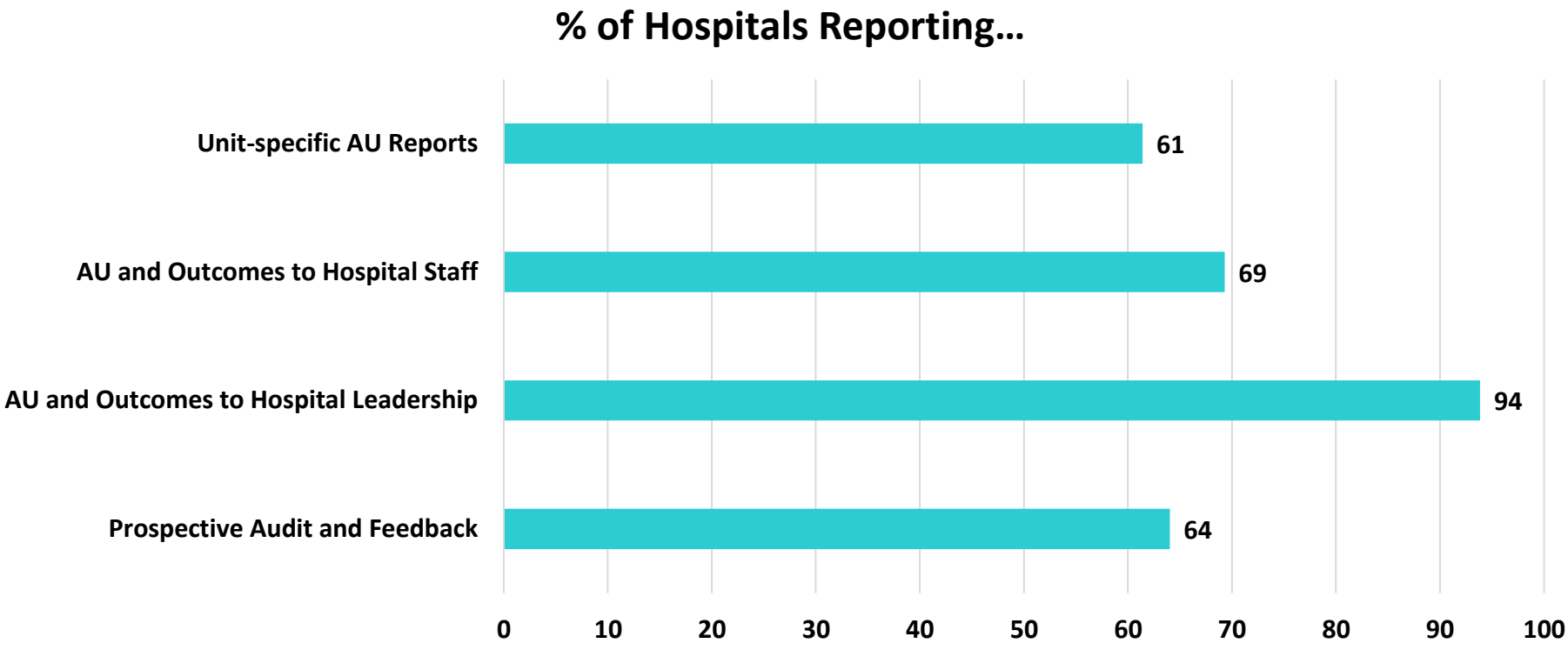
Action Items – All Hospital Types



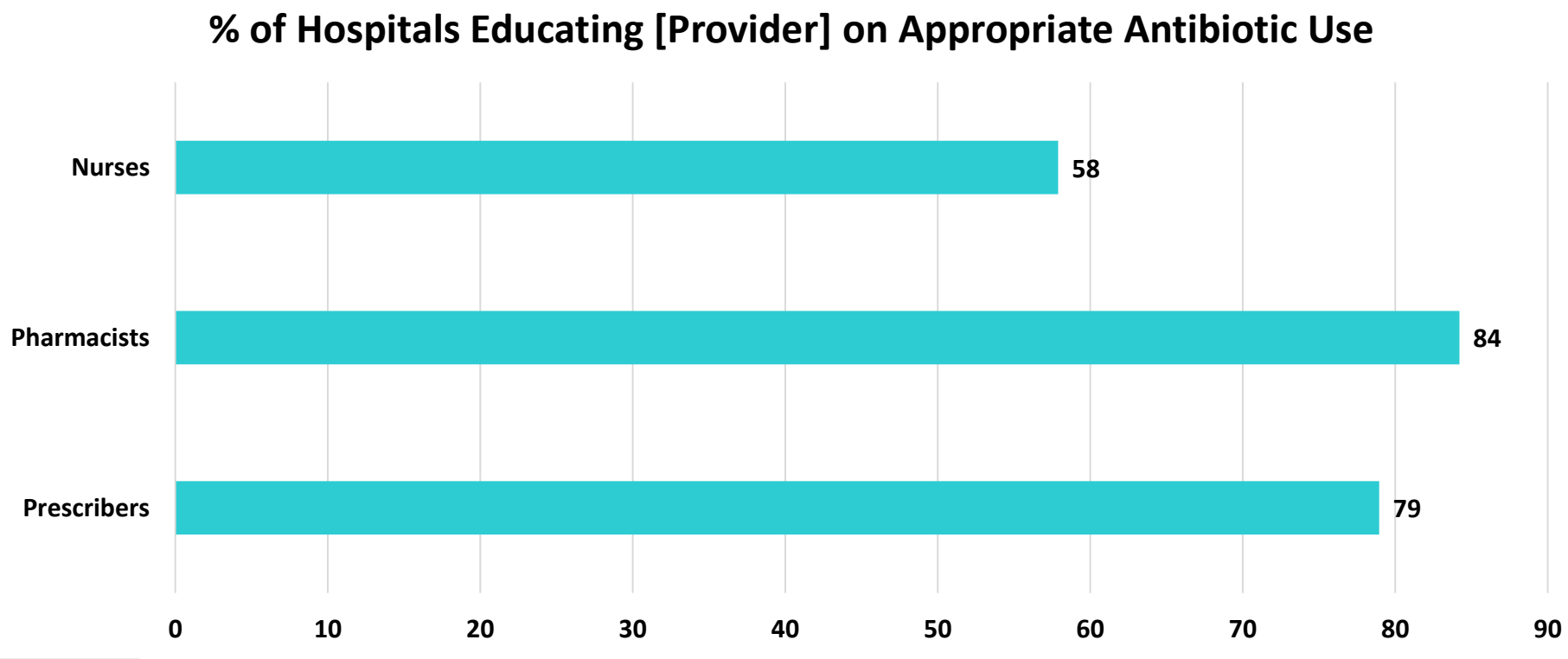
Tracking Items – All Hospital Types



Reporting Items – All Hospital Types



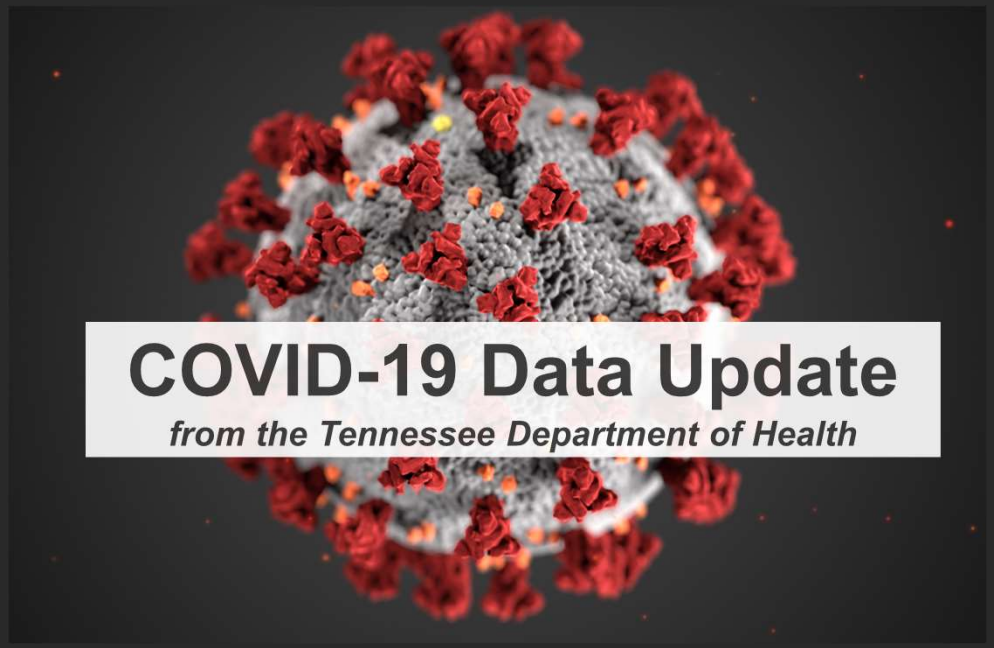
Education Items – All Hospital Types



Areas for Improvement Statewide

- Nursing Education in Acute Care Hospitals
- Prior-Authorization Adoption
- Transition from DDD to DOT Tracking
- Antibiotic Resistance Patterns – not 100%?
- Informing Staff of Antibiotic Stewardship Outcomes

COVID – 19 Update – Christopher Wilson



COVID-19 Data Update

from the Tennessee Department of Health

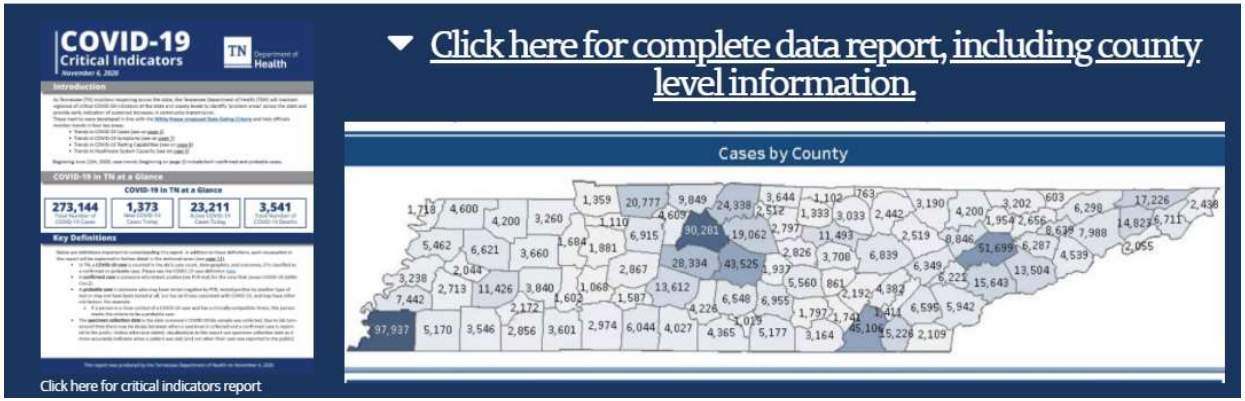
TN

Tennessee Department of Health
June 8th, 2021

Tennessee Situation Report (*as of 6/7*)

Cases	Deaths	Hospitalizations	Tests
+29 since yesterday	-1 since yesterday	-31 (net) since previous day	+4,274 since yesterday
864,195 Total	12,479 Total	354 Current Total*	8,033,341 Total
			2.08% Positive Today

**Please note*: Hospitalization totals are subject to a 24 hour delay, thus they represent hospitalizations through yesterday. These data are dynamic and change as hospitals lear information on their patients and enter data into our Healthcare Resource Tracking System. Please see our Current COVID Hospitalizations visualization for the most up-to-dat information.



https://www.tn.gov/health/cedep/ncov.html

Syndromic Surveillance

SYMPTOMS

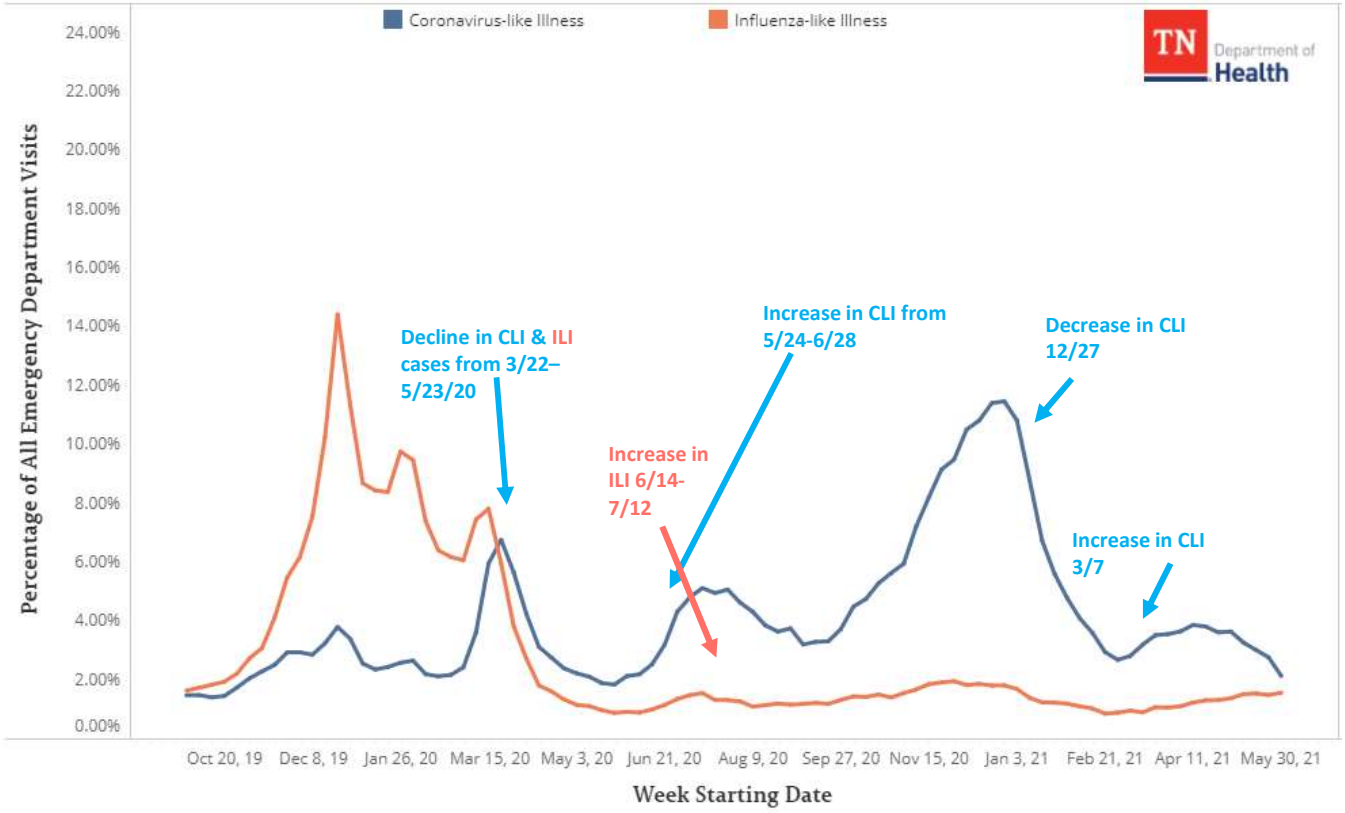
Downward trajectory of influenza-like illnesses (ILI) reported within a 14-day period

AND

Downward trajectory of COVID-like syndromic cases reported within a 14-day period

- **Emergency department data**
  - **Chief complaints**
  - **Discharge diagnoses**
- **Deidentified**
- **Received within 24h of patient encounter**
- **Reported from 99 hospitals across TN**
- **Syndromes**
  - **Influenza-like illnesses (ILI) is defined by terms, free text, or discharge diagnoses that are likely to be related to illness caused by seasonal influenza. The visits counted within these criteria will contain a percentage illnesses caused by conditions other than influenza infection. These results should be considered preliminary in nature and are not all confirmed diagnoses of disease.**
  - **COVID-like illnesses (CLI): is defined as symptom terms, free text, or discharge diagnoses specified by CDC that are likely to be related to illness caused by the 2019 novel Coronavirus. The visits counted within these criteria will contain a percentage illnesses caused by conditions other than novel coronavirus infection. The visits counted within these criteria will contain a percentage illnesses caused by conditions other than novel corona virus infection. These results should be considered preliminary in nature and are not all confirmed diagnoses of disease.**

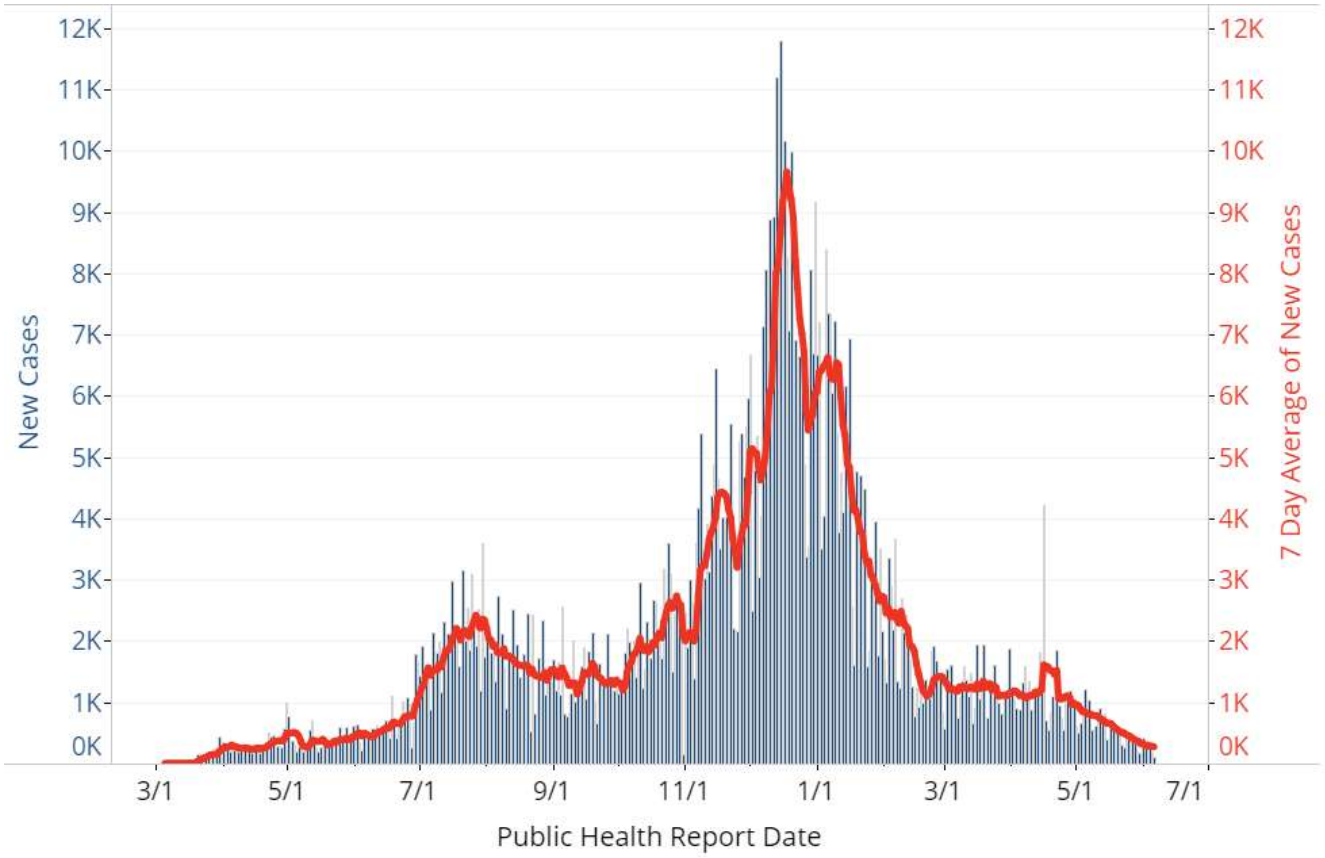
Syndromic Surveillance (updated 5/30)



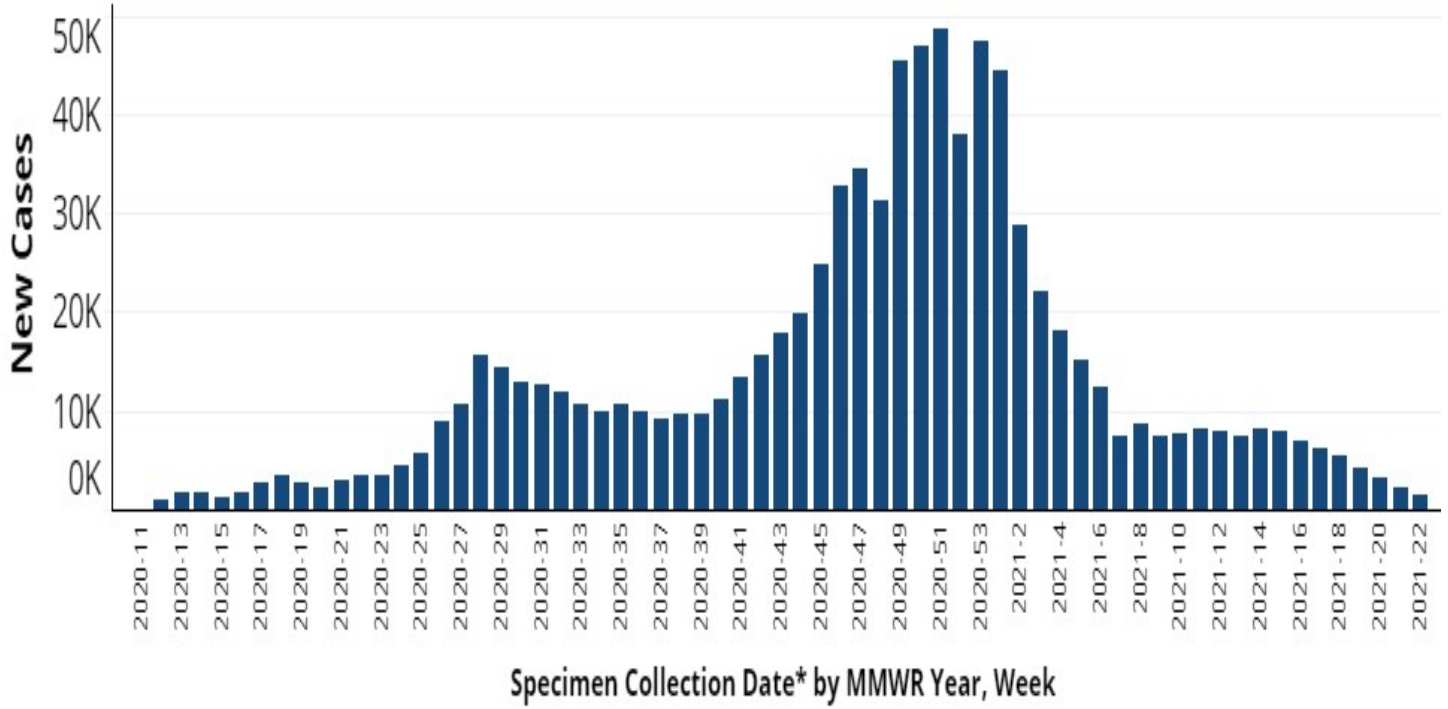
https://www.tn.gov/health/cedep/ncov/data/syndromic-surveillance.html

Case Counts (Daily) (6/7)

By Public Health Report Date



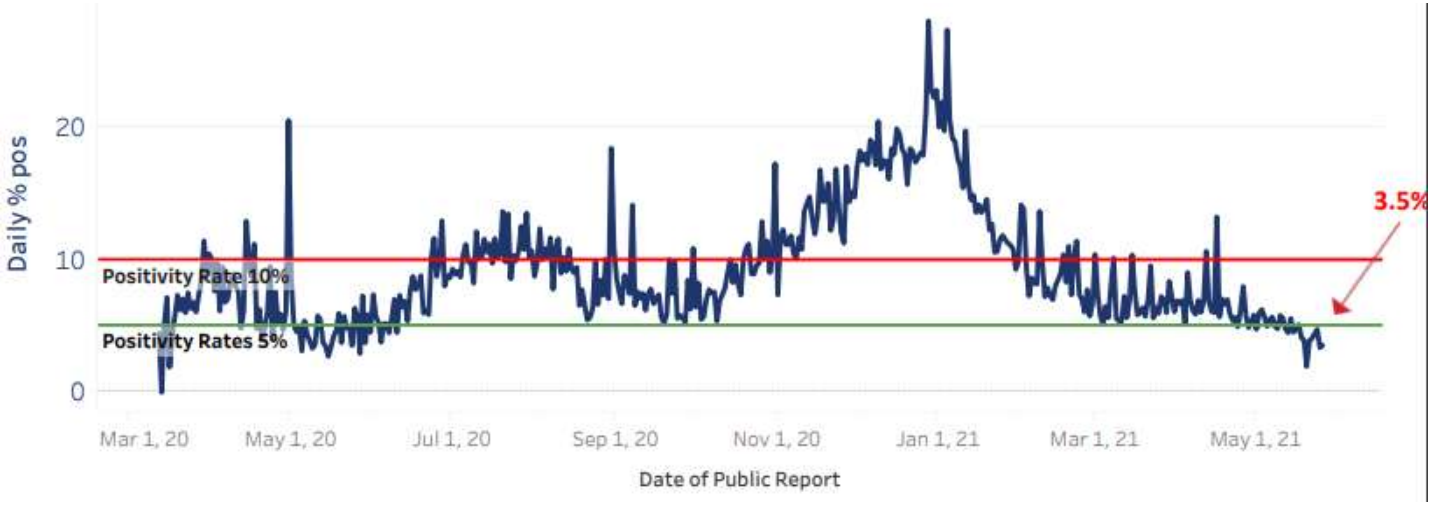
Case Counts (Weekly) (6/7)



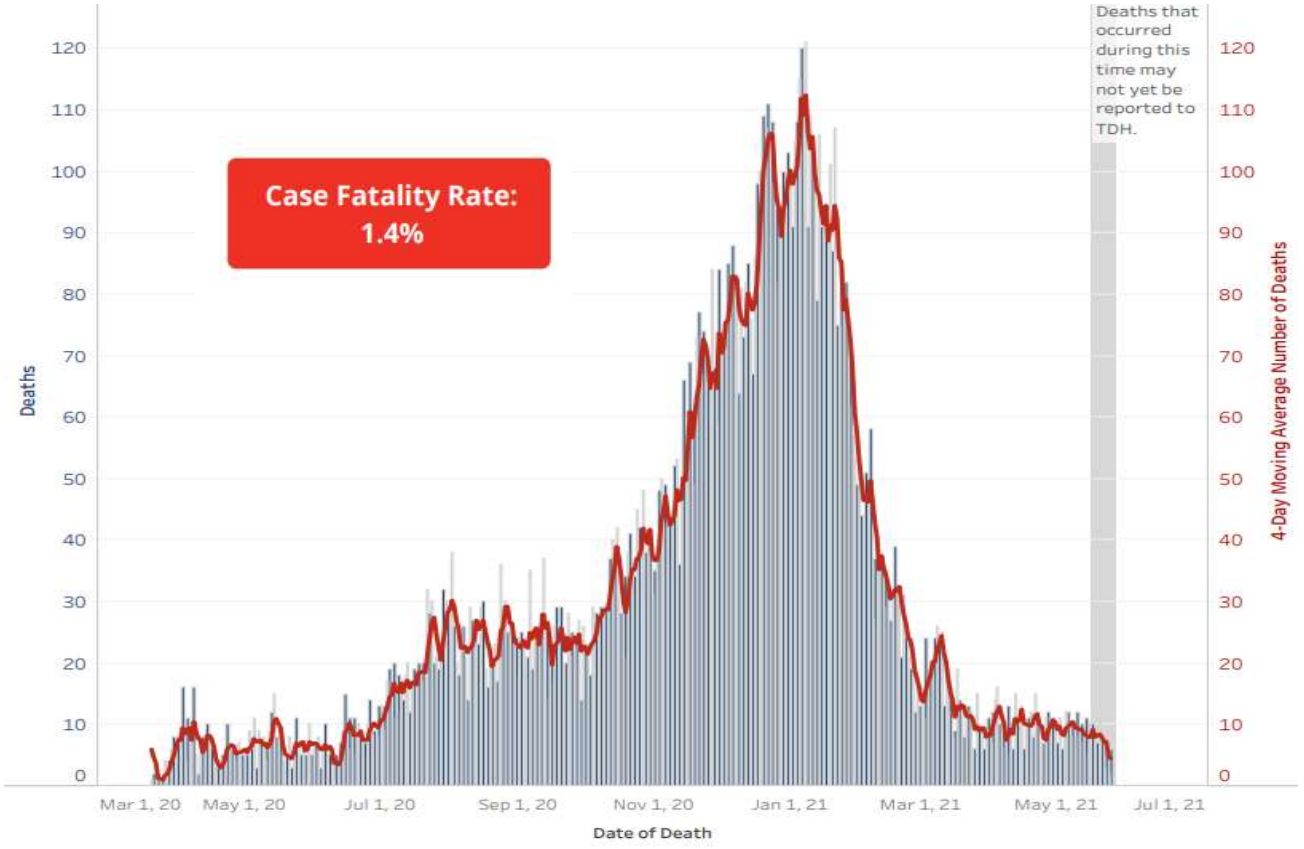
MMWR Weeks run Sun-Sat

PCR Test Percent Positivity

7 Day Average: 3.30%



Deaths (n=12,479) (as 6/4)



Healthcare Resources

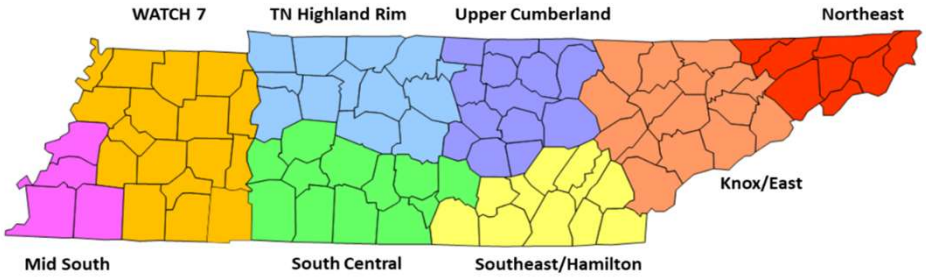
- **Healthcare Resource Tracking System**
  - **Established in 2006**
- **Acute care hospitals report daily:**
  - **Number of beds (floor / ICU / AIIR)**
  - **Number of ventilators**
  - **Amount of PPE**
  - **Number of COVID-19 patients (floor, ICU, ventilated, pending)**

HOSPITALS

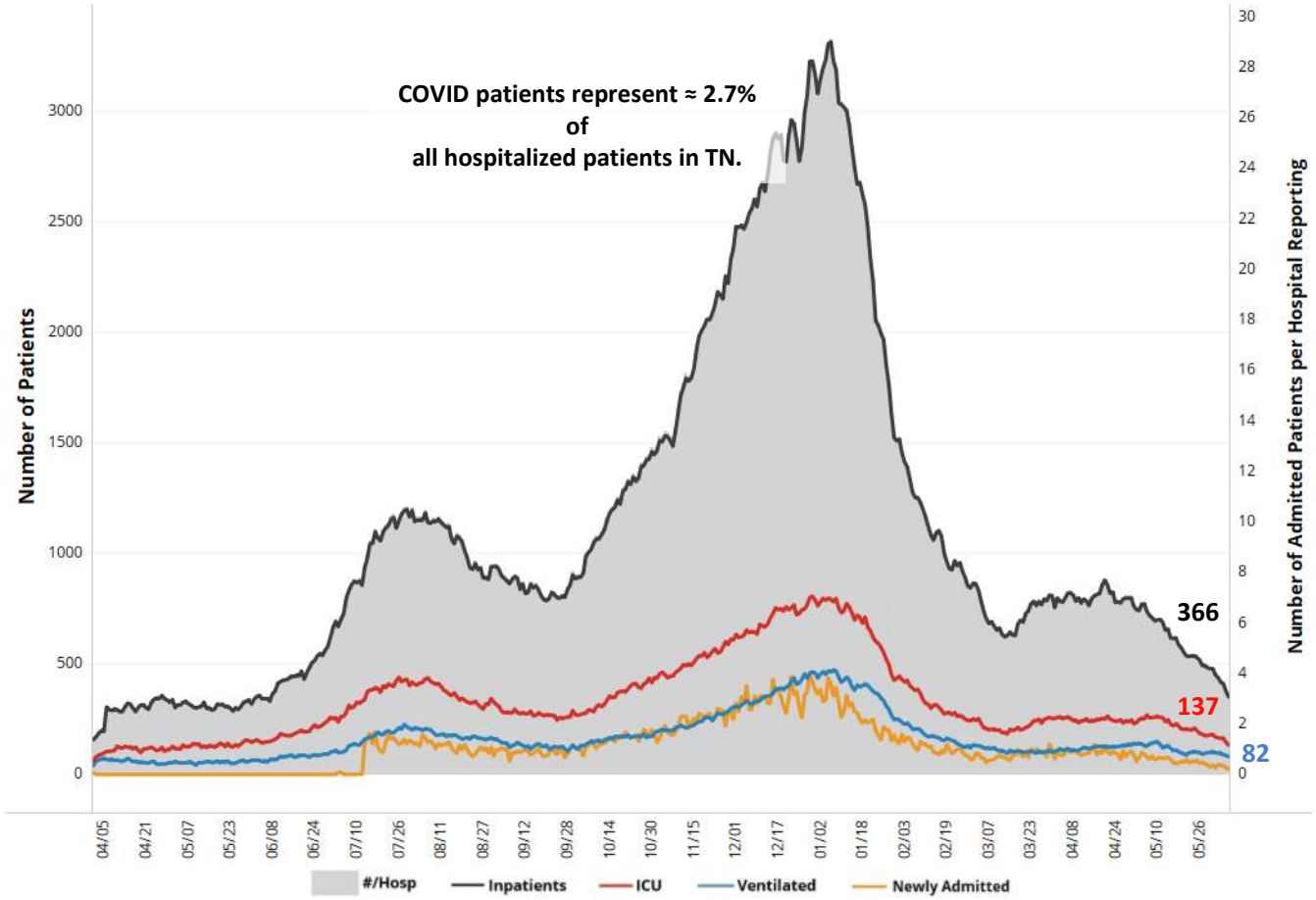
Treat all patients without crisis care

AND

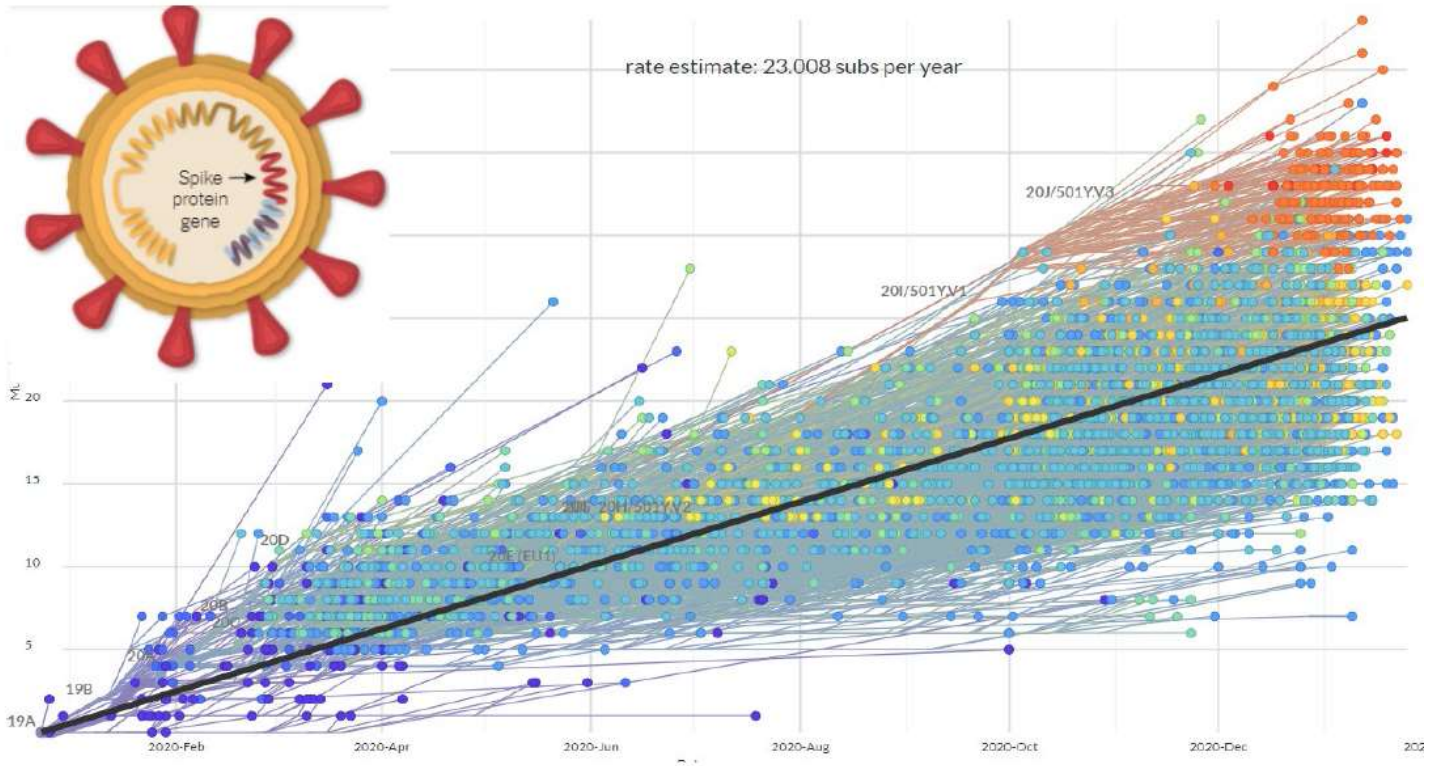
Robust testing program in place for at-risk healthcare workers, including emerging antibody testing



Current Hospitalizations (as 6/7)

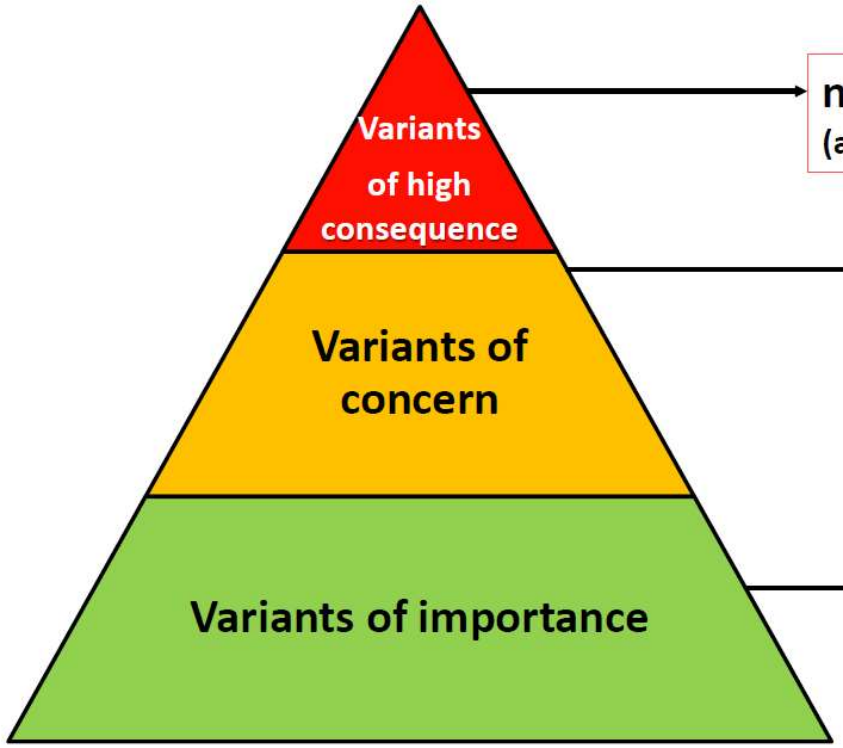


Genomic Epidemiology of SARS-CoV-2



(https://nextstrain.org/ncov/global)

SARS-CoV-2 Variant Levels



n=0
(at this time)

n=5
- B.1.1.7
- P.1
- B.1.351
- B.1.427
- B.1.429

n=8
- B.1.526, B.1.526.1
- B.1.525
- B.1.617, B.1.617.1, B.1.617.2, B.1.617.3
- P.2

TN

TN

TN Variant Surveillance (6/5)

Name	First Detected	Transmissibility	Ability of Current Therapeutics to be Effective?	Protection by past infection or vaccine?	In Tennessee?
B.1.1.7	United Kingdom	+~50%	Minimal impact on neutralization	Minimal impact on neutralization	3645
B.1.351	South Africa	+~50%	Moderate impact on neutralization	Moderate reduction in neutralization	13
B.1.429	California	+~20%	Significant impact on neutralization by some, but not all, EUA therapeutics	Moderate reduction in neutralization	41
B.1.427	California	+~20%	Significant impact on neutralization by some, but not all, EUA therapeutics	Moderate reduction in neutralization	43
P.1	Japan/Brazil	?	Moderate impact on neutralization	Reduced neutralization	72

Vaccine update

Breakthrough Cases (as 5/26)

Total Number of Vaccine Breakthrough Infections Reported to CDC	Total Cases in TN = 907
Asymptomatic infections	216 (23%)
Deaths	16 (2%)
Females	575 (62%)
Hospitalizations	97 (11%)
People aged > 60	425 (46%)

- *Prior to May 1st: All people that meet case definition*
- *May 1st and after: People that meet case definition and had an outcome of hospitalized or deceased from COVID-19*

Vaccination update (as 6/7)

Total Vaccinations Reported	Vaccinations Reported Since **5/31/2021**	% of People Statewide With at Least One Dose	% of People Statewide Fully Vaccinated
4,951,577	86,970	39.9%	34.2%

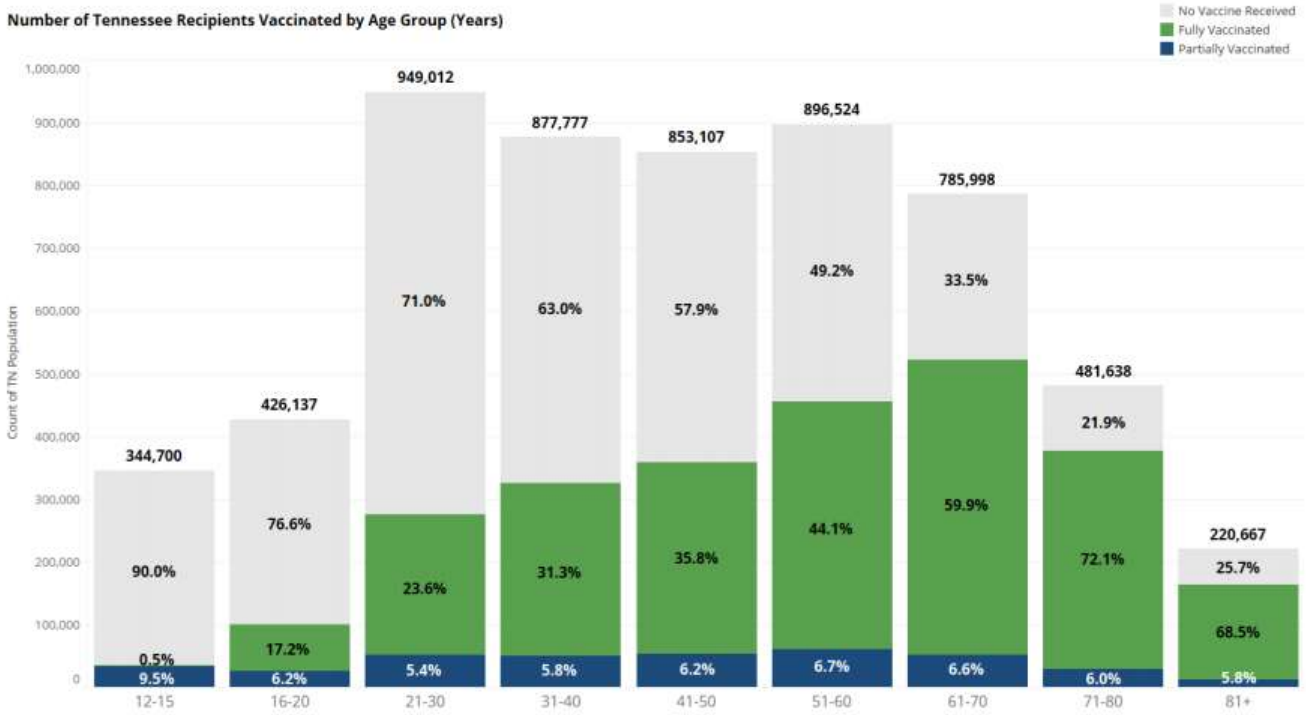
Providers administering COVID-19 vaccines are expected to report vaccine doses to the state immunization information system (TennIIS) within 24 hours of administration and are required to report doses no later than 72 hours after administration.

Please note: The Summary Page includes all vaccinations reported to TennIIS from Tennessee providers, regardless of patient's state of residence. These numbers will differ from the Population Page, which contains data on Tennessee residents only.

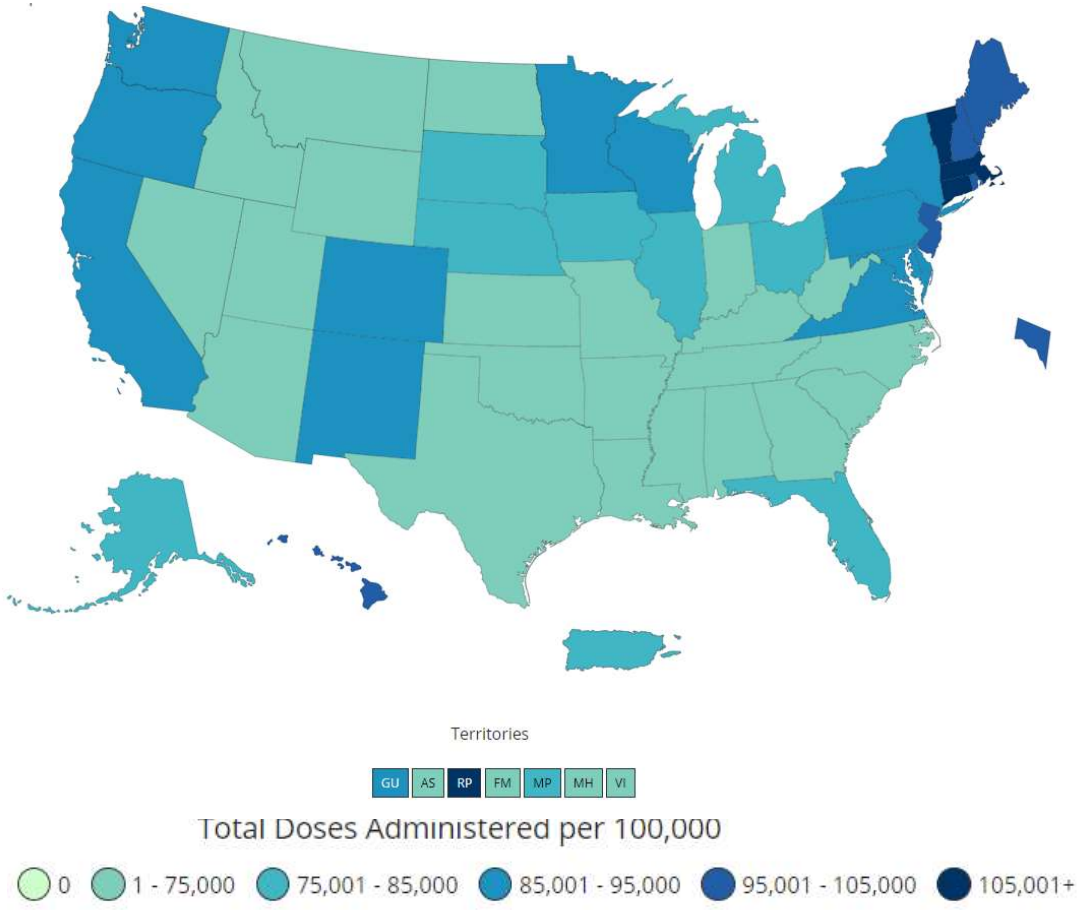
Age Group	People Vaccinated	% of People Vaccinated
12-15 years	37,589	1.4
16-20 years	107,893	4.0
21-30 years	292,585	10.8
31-40 years	340,288	12.5
41-50 years	375,423	13.8
51-60 years	473,813	17.4
61-70 years	539,037	19.8
71-80 years	386,750	14.2
81+ years	168,290	6.2
Pending	347	0.0
Total	2,722,015	100.0

Patient Race	People Vaccinated	% of People Vaccinated
Asian	56,945	2.1
Black or African American	305,185	10.9
White	1,735,798	64.5
Other/Multiracial	488,460	18.3
Unknown	135,627	4.3
Total	2,722,015	100.0

Vaccination by age (as 6/4)



Vaccination update (as 6/7)



High SVI Counties (as 6/4)

Of 35 High SVI Counties:

3 have first dose coverage above the state rate (Madison Co is highest at 47.33%)

5 have first dose coverage rates within 90% of the state rate

9 have first dose coverage rates within 80% of the state rate

18 have first dose coverage rates <80% of the state rate (Grundy Co is lowest at 19.37%)

Overall lowest vaccination rates: Moore (16.81%), Grundy (19.37%), Macon (21.51%)

Project Firstline – Judy Baker

Topic 1: The Concept of Infection Control

06/08/2021

Agenda:

- Project Firstline and the concept of infection control
  - Video
  - Discussion and reflection
- Session feedback form and next steps

Learning Objectives:

- Articulate at least one (1) primary goal of infection control

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Why do we do infection control?

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INSIDE INFECTION CONTROL

WHAT'S THE GOAL OF INFECTION CONTROL?

EPISODE 1

CDC

PROJECT FIRSTLINE

Upcoming Session Topics

Coming up next

- The Basic Science of Viruses
- How Respiratory Droplets Spread COVID-19
- How Viruses Spread from Surfaces to People
- How COVID-19 Spreads: A Review

Broader Themes and Topics

- Infection Control: The Basics
- Source Control
- PPE: Basics
- PPE: Donning and Doffing
- Hand Hygiene
- Crisis Standards of Care
- Triage
- Standard and Transmission-Based Precautions
- Microbiology Basics
- Recognizing Risk
- Environmental Cleaning and Disinfection

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Key Messages

- The goal of everything we do in infection control, for any disease, is to keep people from getting sick.

- The goal of Project Firstline is to make sure you have the infection control knowledge that you need and deserve to keep yourself, your patients, your colleagues, and your family safe.

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Resources and Future Training Sessions

Project Firstline on CDC:
https://www.cdc.gov/infectioncontrol/projectfirstline/index.html

Project Firstline on Facebook:
https://www.facebook.com/CDCProjectFirstline/

Twitter:
https://twitter.com/CDC_Firstline

YouTube Playlist:
https://www.youtube.com/playlist?list=PLvrp9iOILTQZQGtDnSDGViKDdRtIc13VX

To sign up for Project Firstline e-mails, click here:
https://tools.cdc.gov/campaignproxyservice/subscriptions.aspx?topic_id=USCDC_2104

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Topic 2: The Basic Science of Viruses

06/08/2021

Agenda:

- Introduction
- The Basic Science of Viruses
  - Video
  - Reflection
- Session feedback form and next steps

Learning Objectives:

- Differentiate one (1) core difference between SARS-CoV-2 and COVID-19.
- Identify, and explain to others, the three (3) main parts of a virus.

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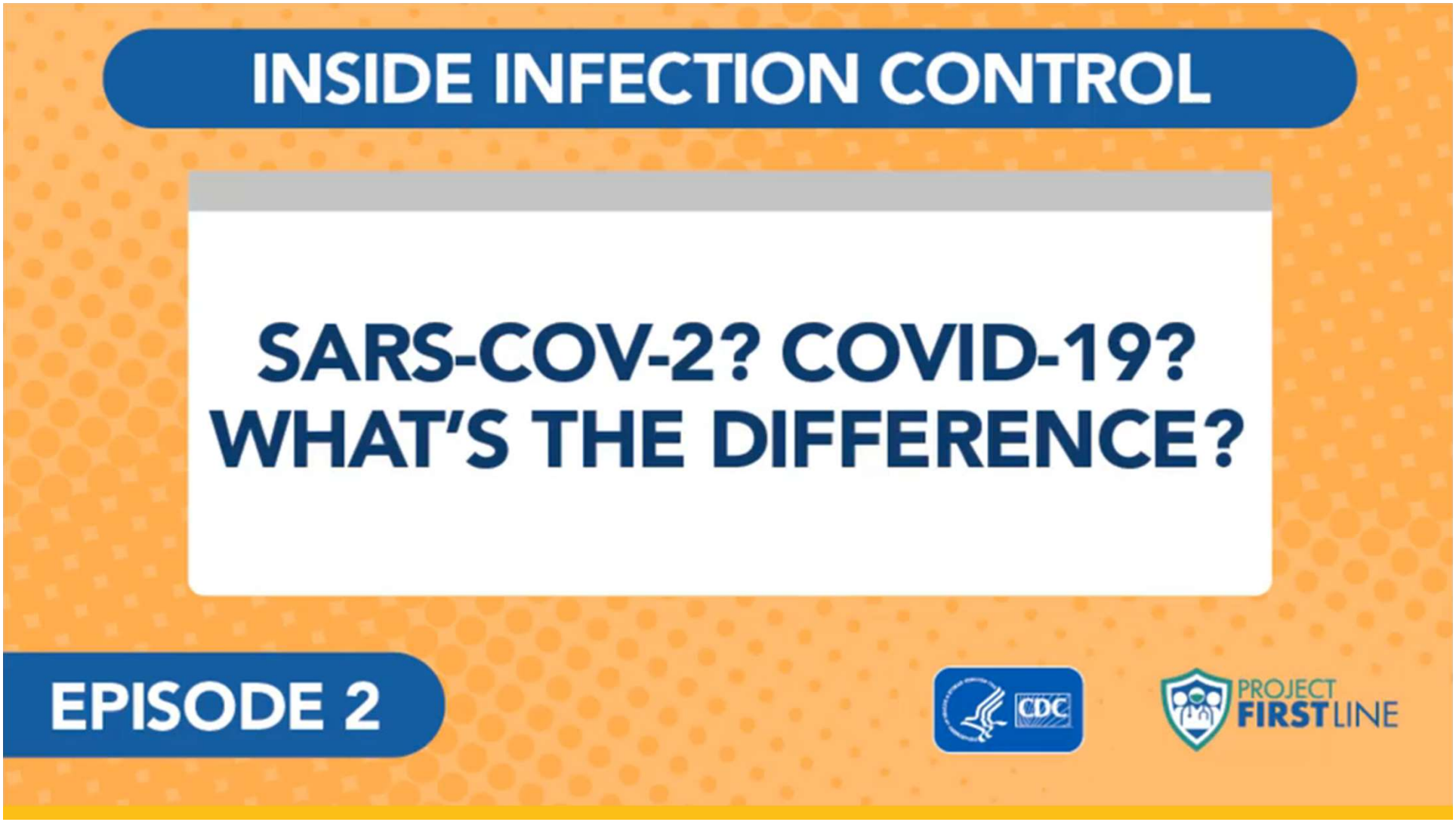

INSIDE INFECTION CONTROL
SARS-COV-2? COVID-19?
WHAT'S THE DIFFERENCE?
EPISODE 2
CDC
PROJECT
FIRSTLINE

INSIDE INFECTION CONTROL

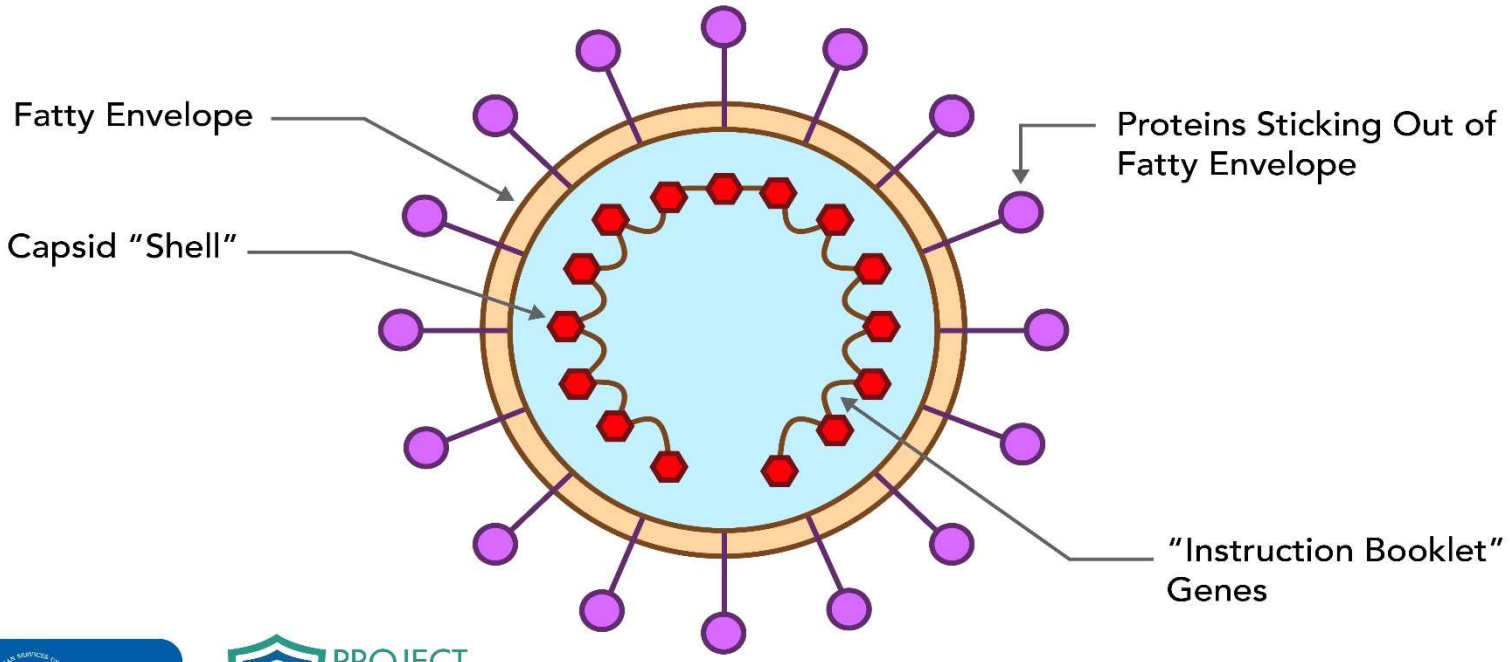
WHAT'S A VIRUS?

EPISODE 3

CDC

PROJECT FIRSTLINE

THE PARTS OF VIRUSES



PROJECT FIRSTLINE

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Reflection

Can you imagine a realistic, every-day occasion when you could practice using this job aid or explain this concept to others?

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Key Messages

- SARS-CoV-2 is the official, scientific name of the virus, the germ that causes the disease COVID-19
- COVID-19 is the name of the disease – the fever, cough, chills and other symptoms that people have when they are infected with the virus SARS-CoV-2.
- All viruses have two parts:
  - Genes that contain all the information needed to make more virus copies
  - Proteins that protect the genes and help the virus spread
- Some viruses – SARS-CoV-2 is one of them – also have a third part: an envelope made of special fats that protects the genes and proteins

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Resources and Future Training sessions

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Project Firstline on Facebook:
https://www.facebook.com/CDCProjectFirstline/

Twitter:
https://twitter.com/CDC_Firstline

Youtube:
https://www.youtube.com/playlist?list=PLvrp9iOILTQZQGtDnSDGViKDdRtIc13VX

To sign up for Project Firstline e-mails, click here:
https://tools.cdc.gov/campaignproxyservice/subscriptions.aspx?topic_id=USCDC_2104

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Feedback form

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Next Steps

- **Next Call**
  - August 10 2pm Eastern/1pm Central Time
  - Topic: Continuation of Project Firstline, etc.
  - Topic: Prior Authorization Adoption
    - Seeking Volunteers to discuss their experience

- **Feedback always appreciated**
  - Christopher.evans@tn.gov